MINUTES OF THE 129 TH MEETING OF THE WATER MANAGEMENT BOARD MATTHEW TRAINING CENTER 523 EAST CAPITOL AVENUE PIERRE, SOUTH DAKOTA

JULY 10, 2003

<u>CALL TO ORDER:</u> Vice Chairman Leo Holzbauer called the meeting to order at 9:00 a.m. CDT. A quorum was present.

The following were present at the meeting.

<u>Board Members:</u> Leo Holzbauer, Rodney Freeman, Bernita Loucks, Francis Brink, and Marian Gunderson. Dwayne Rollag was absent.

<u>Department of Environment and Natural Resources (DENR):</u> Eric Gronlund, Karen Schlaak, Genny McMath, Stacy Johnson, Don Stroup, Ken Buhler, Jim Goodman, Ron Duvall, Lynn Beck, and Gale Selken, Water Rights Program; Jeanne Goodman and Patrick Snyder, Surface Water Quality Program.

Attorney General's Office: Diane Best and John Guhin.

<u>Legislative Oversight Committee:</u> Senator Marguerite Kleven, Sturgis, Senator Frank Kloucek, Scotland, and Representative Lou Sebert, Mitchell.

<u>Discussion on Well Drillers Requirements:</u> Jim Hutmacher, Chamberlain.

Water Permit No. 1791-1: John Brown, Pierre.

Water Right No. 3466-3: Phil Hines, Prior Lake, MN and Ray Rylance, Watertown.

<u>Water Permit No. 1587A-1:</u> Francis Toscana and Rollin Sieveke, Deadwood; Jack Cole, Spearfish.

<u>Water Right No. 970-3 and Water Permit No. 6382-3:</u> William St. Clair, Tulare, Kevin Dettler, Doland, and John McDowell, Aberdeen.

<u>Flood Control Permit No. FC-30:</u> Tom Berkland, Sioux Falls, Mike Barnes, Brad Jones, and Kevin Adams, Omaha, NE.

Others: John Loucks, Rapid City and Pat Cerny, Burke.

<u>BOARD REORGANIZATION:</u> Motion by Brink, seconded by Freeman, to appoint Leo Holzbauer as chairman, Rodney Freeman as vice chairman, and Bernita Loucks as secretary. Motion carried.

<u>APPROVE MINUTES FROM MAY 7, 2003, MEETING:</u> Motion by Brink, seconded by Loucks, to approve the minutes from. the May 7, 2003, Water Management Board meeting. Motion carried.

OCTOBER 1-2, 2003, MEETING LOCATION: The next Water Management Board meeting will be October 1-2, 2003, at the Matthew Training Center in Pierre.

STATUS AND REVIEW OF WATER RIGHTS LITIGATION: John Guhin reported that the northeast recreation lakes case is before the SD Supreme Court. That case has been argued and the court is preparing an opinion. The Lake Thompson case has been dismissed on stipulation. The state lost the Missouri River case regarding the extent of the authority of the Corps of Engineers with regard to manipulation of the waters of the main stem reservoir. Several other cases have been filed. A multi-district panel will hear a petition to transfer all the remaining cases to it. There will be a hearing regarding this issue in Portland, Maine, at the end of July.

<u>ADMINISTER OATH TO DENR STAFF:</u> Chairman Holzbauer administered the oath to DENR staff who intended to testify during the board meeting.

REQUEST TO ADVERTISE TRIENNIAL REVIEW OF SURFACE WATER QUALITY STANDARDS RULES: Patrick Snyder, Surface Water Quality Program, requested permission to advertise proposed rule changes to the water quality standards. The public hearing will take place at the December 3-4, 2003, Water Management Board meeting.

Motion by Freeman, seconded by Brink, to authorize the department to advertise for a December 3, 2003, public hearing to consider revisions to the surface water quality standards rules. Motion carried.

<u>DISCUSSION OF WELL DRILLER REQUIREMENTS:</u> During the last Water Management Board meeting, the board requested that a representative of the SD Well Driller's Association be invited to come to the next board meeting to discuss the possibility of amending the state's well driller's requirements.

Jim Hutmacher, SIB Well Driller's Association, reported that the main job of the association is to preserve and protect ground water and educate its members. The next general membership meeting of the SD Well Driller's Association will be during the annual convention in March 2004. Mr. Hutmacher noted that he has discussed the well driller's requirements with several members of the association. Most of the individuals indicated they do not want to see the requirements get less stringent. The association is not opposed to requiring an open book test on the well construction rules. Mr. Hutmacher suggested that the state offer the test three or four times during the year. The well driller would be required to take the test at a set location.

The National Groundwater Association has a voluntary certification program. Mr. Hutmacher stated that 23 states are currently using their testing program for licensure. The testing program includes a general exam that the operator has to pass in order to move on. Then they are required to test on one specialized category.

Mr. Hutmacher stated that he believes a well driller has to at least have some general knowledge or some ability to run a drill rig. Mr. Hutmacher also noted that if a well driller does not complete the continuing education as required, there should be some type of penalty.

Representative Lou Siebert noted that continuing education should be mandatory.

Chairman Holzbauer thanked Mr. Hutmacher for his input regarding well driller's requirements.

<u>NEW WATER PERMIT APPLICATIONS:</u> The pertinent qualifications attached to approved water permit applications throughout the hearings are listed below:

Well Interference Qualification

The well(s) approved under this permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

Well Construction Rule Qualification No. 1

The well(s) authorized by Permit No. _____shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) from the producing formation to the surface pursuant to Section 74:02:04:28.

Well Construction Rule Qualification No. 2

The well(s) authorized by Permit No. _____shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.

<u>Irrigation Water Use Questionnaire Qualification</u>

This permit is approved subject to the irrigation water use questionnaire being submitted each year.

Low Flow Qualification

Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

<u>UNOPPOSED NEW WATER PERMITS ISSUED BY THE CHIEF ENGINEER WITHOUT A HEARING BEFORE THE BOARD:</u> See attachment.

<u>WATER PERMIT APPLICATION NO. 1791-1, BART BURDICK:</u> Don Stroup presented his report on the application.

The application proposes to appropriate 1.8 cfs of Boxelder Creek water in Harding County for irrigation for 126 acres. Water would be diverted from Boxelder Creek to irrigate land by a center pivot system. The proposed annual period of use is from May 1 to October 31.

Mr. Stroup reported that USGS historical data from 1956 to 2001 for the Little Missouri River at Camp Crook indicates there is a 50% probability monthly median flows could range from 5 to 57 cfs or greater for any given May 1 to October 31 annual period. There is a 75% probability monthly median flows at this same location could be in the 2 to 12 cfs range or greater for the same period.

Mr. Stroup stated that historical data indicates sufficient water should be available in Boxelder Creek for the proposed project during normal stream flow conditions through the annual May 1 through October 31 period. Boxelder Creek cannot be considered a reliable source of water in late summer and early fall months during periods of below normal stream flow conditions.

The chief engineer recommended approval of the application with the Low Flow Qualification, the Irrigation Water Use Questionnaire Qualification and the following qualification:

The diversion of water shall be in accordance with any written orders issued by the chief engineer.

Mr. Stroup stated that the following note was added to the chief engineer's recommendation:

Boxelder Creek may not be a reliable source of water, especially during periods of drought. As the permit holder you will need to limit your withdrawals so the downstream prior rights are not impaired. The permit may be subject to periodic shutoff orders issued by the chief engineer.

Mr. Stroup noted that there are no prior water rights on Boxelder Creek, Harding County, South Dakota. There is one prior right in North Dakota.

John Brown, attorney from Pierre, stated that Bart Burdick had asked him to attend the Water Management Board meeting on his behalf. Mr. Brown noted that the gauging station information does not include some other stream flows from South Coal Bank Creek that flow into Boxelder Creek prior to where Mr. Burdick intends to withdraw water. Mr. Brown also stated that Mr. Burdick indicated to him that the prior permit in North Dakota has not been used in at least 10 years.

Motion by Freeman, seconded by Gunderson, to approve Water Permit Application No. 1791-1, Bart Burdick, subject to the qualifications set forth by the chief engineer. Motion carried.

WATER PERMIT APPLICATION NO. 6405-3, ROBERT & RICHARD KREBER: Diane Best reported that the department received a motion for a continuance of this matter from Ed and Rick Kreber. The Water Rights staff has no objection to delaying this matter until the next board meeting.

The parties are in the process of discussing a settlement of the issues in this matter.

Motion by Freeman, seconded by Gunderson, to continue this matter until the October 1-2, 2003, Water Management Board meeting. Motion carried.

WATER PERMIT APPLICATION NOS. 6406-3 AND 6416-3, HAVERHALS FEEDLOT, INC.: Jim Goodman presented his report on the application.

Water Permit Application No. 6406-3 proposes to appropriate 0.111 cfs (50 gpm) from one well approximately 600 feet deep in Lincoln County. The water is for commercial use in an existing cattle feedlot.

The Dakota Formation is a buried sand, sandstone and shale which is under artesian conditions at this site. The aquifer contains about 4.297 million acre-feet of recoverable water in storage in Lincoln County.

The Water Rights Program monitors about 35 observation wells completed into the Dakota Formation in Lincoln County.

The nearest existing water permit is No. 6252-3, which is also for Haverhals and for a feedlot. These wells will about $\frac{1}{4}$ mile from this existing site.

Mr. Goodman stated that interference is not anticipated to be of concern at the proposed diversion rate. Water is available from the Dakota aquifer. Plans and specifications for this facility have not been submitted to the department for review.

The chief engineer recommended approval of Application No. 6406-3 with the Well Interference Qualification, Well Construction Rule Qualification No. 2, and the following qualifications:

- 1. Permit No. 6406-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-112 for concentrated animal feeding operations.
- 2. Permit No. 6406-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:
 - a) Chapter 74:54:01 Ground Water Quality Standards,
 - b) Chapter 74:54:02 Ground Water Discharge Permit,
 - c) Chapter 74:51:01 Surface Water Quality Standards,
 - d) Chapter 74:51:02 Uses Assigned to Lakes,
 - e) Chapter 74:51:03 Uses Assigned to Streams, and
 - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions.

Water Permit Application No. 6416-3 proposes to appropriate 0.06 cfs (26 gpm) from one well in Lincoln County. The water is for commercial use in an existing cattle feedlot. This application is about ½ mile from No. 6406-3.

The Dakota Formation is a buried sand, sandstone and shale which is under artesian conditions at this site. The aquifer underlies 484 square miles and contains an estimated 4.297 million acrefeet of recoverable water in storage in Lincoln County.

The Water Rights Program monitors 35 observation wells completed into the Dakota Formation in Lincoln County.

The nearest existing water permit is No. 6252-3 and water permit application No. 6406-3, which are both for Haverhals and for a feedlot. Interference is not a concern and no adverse drawdown is expected.

Mr. Goodman noted that water is available. The plans and specifications for this portion of the facility have been submitted to and approved by DENR.

The chief engineer recommended approval of Water Permit Application No. 6416-3 with the Well Interference Qualification, Well Construction Rule Qualification No. 2, and the following qualifications:

- 1. Permit No. 6416-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-112 for concentrated animal feeding operations.
- 2. Permit No. 6416-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:
 - a) Chapter 74:54:01 Ground Water Quality Standards,
 - b) Chapter 74:54:02 Ground Water Discharge Permit,
 - c) Chapter 74:51:01 Surface Water Quality Standards,
 - d) Chapter 74:51:02 Uses Assigned to Lakes,
 - e) Chapter 74:51:03 Uses Assigned to Streams, and
 - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions.

Motion by Brink, seconded by Gunderson, to approve Water Permit Application Nos. 6406-3 and 6416-3, Haverhals Feedlot, Inc., subject to the qualifications set forth by the chief engineer. Motion carried.

<u>CANCELLATION CONSIDERATIONS</u>: Eric Gronlund reported that three water permits were scheduled for cancellation. The permit owners were notified on the hearing and the reason for cancellation. No letters in opposition to the cancellations were submitted.

The following were recommended for cancellation for the reasons listed.

Water Permit No. 1491-1 filed by Rod Barry; non-construction Water Permit No. 978-2 filed by Robert Christensen; non-construction Water Permit No. 2825-3 filed by Jobee Acres; abandonment/forfeiture

Motion by Gunderson, seconded by Freeman, to cancel the three water permits for the reasons listed. Motion carried.

<u>DEFERRED VESTED WATER RIGHT APPLICATION NO. 1463-1, DONALD KISSACK:</u> Mr. Gronlund presented the report on the deferred vested water right application.

Mr. Gronlund reported that Vested Water Right Application No. 1463-1 was filed in 1989 seeking to validate a claim of 0.62 cfs from the Redwater River to irrigate 21.6 acres. The application claimed a priority date of April 7, 1897. This is based on a location notice filed by E. D. Ralph in 1897. The location filing claimed 500 inches in the Spearfish Stream, which is not the Redwater River. The claim was deferred by the Water Management Board in 1989 in order for the applicant to provide additional information to document the use of water for irrigation from the Redwater River dating back to 1897. Mr. Gronlund noted that the application has been on deferred status for the past 14 years.

The Water Rights staff has made an effort to clean up and bring finality to some of these deferred applications. The original applicant, Mr. Kissack, has passed away but the land was passed on to his son, Don Kissack.

Mr. Gronlund stated that in April 2003, he was able to contact Don Kissack and view the property. At that time Mr. Gronlund explained the reasons why the application was deferred, and discussed what was necessary in order for Mr. Kissack to prove up a vested water right claim.

Mr. Gronlund said Mr. Kissack told him there was originally a dam on the Redwater River that provided the head to divert water into a small ditch or was pumped into this small ditch to supply irrigation to the property. The remnants of that old ditch are still visible. The report contains photographs of the old ditch. There are large trees in the bottom of the ditch, which indicates that irrigation may have not taken place for quite some time. Mr. Kissack informed Mr. Gronlund that the dam in the Redwater River breached in the 1960's and was never reconstructed. However, the landowner used an alternate way of irrigating in which he started using pumps. Mr. Kissack showed Mr. Gronlund the three locations along the Redwater River that were pumped.,,

Mr. Gronlund informed Mr. Kissack that he needed to provide some proof of irrigation at least prior to 1955. Mrs. John Kissack and Claude Kissack sent letters to the department in June 2003, stating that irrigation was taking place beginning in at least 1949 until the flood of the 1960's washed it out. The letters also state after the dam washed out water was pumped for irrigation.

Mr. Gronlund stated that the chief engineer recommended validation of Vested Water Right Application No. 1463-1 for 0.62 cfs from the Redwater River to irrigate 21.6 acres with a

priority date of January 1, 1949. The recommendation includes the Irrigation Water Use Questionnaire Qualification and the Low Flow Qualification.

Motion by Gunderson, seconded by Brink, to validate Application No. 1463-1, Donald Kissack, for 0.62 cfs (278 gpm) for irrigation of 21.6 acres with a priority date of January 1, 1949, subject to the qualifications set forth by the chief engineer. Motion carried.

<u>CONSIDER CANCELLATION OF WATER RIGHT NO. 3466-3, PHILLIP HINES:</u> Eric Gronlund presented the information on the proposed cancellation of Water Right No. 3466-3.

Water Right No. 3466-3 appropriates 1 cfs from one well constructed in the East James Management Unit of the Tulare Aquifer to irrigate 91 acres. The water right was originally filed for and obtained by I. A. Schwan and bears an October 15, 1976 priority date. The water right was initially for more acres and 2 cfs, but based on an inspection in 1982 conducted by Burton Jones, the system was only capable of diverting 1 cfs and irrigating 91 acres. The inspection reports the type of system was basically tow lines.

Mr. Gronlund stated that in the 2000 irrigation questionnaire, Mr. Schwan stated that he no longer owned the land. Staff contacted the Register of Deeds and learned that Stanley Lovett now owns the land and the annual irrigation questionnaire was sent to him. Staff began corresponding with Mr. Lovett in February 2001 regarding the fact that no irrigation had taken place. At that time Mr. Lovett planned to determine the history of irrigation on the land and get back to the department as to whether legal excuse existed.

For the 2002 irrigation season, Mr. Lovett did not return the irrigation questionnaire, and the water right was suspended by the Water Management Board in March 2003. Mr. Lovett requested that this matter be brought back before the board for rescission of the suspension. The Water Rights Program then filed a Notice of Cancellation because of the long history of non-irrigation of the property. It was then discovered that the land had been sold to Phillip Hines, Prior Lake, MN in 2001, so Mr. Lovett never really owned the property at the time of suspension. Suspension of the water right was not proper because there was not proper notice.

Upon learning about the change of ownership, staff from the Water Rights Program discussed the past history of non-irrigation with Mr. Hines, and provided him with the laws regarding forfeiture for non-use. Mr. Hines has expressed an interest in irrigating.

In April 2003 an investigation was conducted in and no visible signs of irrigation were found. Mr. Gronlund pointed out the table (included in the information packet) which shows that no irrigation has taken place since 1983.

Mr. Gronlund noted that SDCL 46-5-37 states that when water fails to be used beneficially for the purpose for which it was appropriated for a period of three years, the unused water shall revert to the public to be regarded as unappropriated public water. Board Rule 74:02:01:37 further defines an invalid water right as water that has been forfeited for nonuse as specified in SDCL 46-5-37.

The chief engineer recommended cancellation of Water Right No. 3466-3 due to forfeiture for nonuse. The Water Rights' file indicates that the land has not been irrigated for at least 20 years.

Mr. Gronlund noted that generally after a cancellation the landowner would be able to file a new application. This water right is in the Tulare East James Aquifer, which is fully appropriated, so staff has not been recommending approval of past water permit applications from this aquifer.

Raymond Rylance, attorney for Mr. Hines, asked Mr. Gronlund if the information he provided to the board has all been based on what others have indicated and not upon Mr. Gronlund's physical inspection of the property. Mr. Gronlund stated that he had not seen the property.

Ms. Best offered DENR Exhibit 1, the agency file on Water Right No. 3466-3. The exhibit was accepted into the record.

Mr. Rylance offered Exhibit A, a letter from Pullman Well Drilling, Inc. He noted that, contrary to what the Water Rights staff has testified to, the letter from Pullman Well Drilling, Inc. indicates that there is a well on Mr. Hines' property. Mr. Rylance said he is not sure the Water Rights staff has been on the right property.

Pullman Well Drilling, Inc. also states in its letter that the company has worked on the system and done testing on the well several times since 1987. The letter indicates that there has been a problem with the well. Pullman Well Drilling's documentation indicates that the well will not continuously pump 450 gpm on a regular basis. The well can be pumped for 24 to 36 hours and then run out of water. If the well sits for a period of time, it can be pumped again. Mr. Rylance stated that this may qualify as legal excuse for nonuse of the water due to the unavailability of water on a consistent basis.

Mr. Rylance offered Exhibits C, D, E, and F, photographs of the well head and mechanical pump. Mr. Rylance noted that the photographs do not show the traveling gun system, which is located on Mr. Hines' land.

Mr. Rylance also offered Exhibit B, a letter to the chief engineer from Stanley Lovett. The letter states that in 2001 the land was sold to Mr. Hines. Mr. Lovett states that Mr. Hines is not aware of the irrigation questionnaire, but is sure he is interested in irrigating. Mr. Lovett also asks the Water Rights Program to meet with Mr. Hines. Mr. Rylance stated that Mr. Hines finally received title to the property in 2002, and in 2003 he received notification that the water right was being recommended for cancellation.

Mr. Rylance stated that Mr. Hines purchased the property with the full intention of irrigating the property because he believed there was a valid permit. Mr. Rylance said there is ample reason and basis for the board not to cancel the permit. There is no detriment to other water permits in the area.

Mr. Rylance offered Exhibit G, Water Rights Program File Documentation signed by Genny McMath. In her comments, Ms. McMath states that Mr. Lovett said he irrigated in 2002 and would like the opportunity to irrigate in 2003.

All of Mr. Rylance's exhibits were admitted into the record.

Chairman Holzbauer administered the oath to Phillip Hines.

Responding to questions from Ms. Best, Mr. Hines testified that he started the process of purchasing the property in 2001 and closed in 2002. During the process of purchasing the property he did not contact the Water Rights Program to determine whether there was a water right on the property. Mr. Hines said he did not file a water rights transfer when the closing took place. There was a corn crop on the property at the time Mr. Hines was purchasing the property. Mr. Hines said he was familiar with the property prior to purchasing it. He said he had seen an irrigation system on the property three years prior to purchasing the property.

Responding to questions from Mr. Rylance, Mr. Hines testified that he intends to put the irrigation system into operation as soon as possible. Mr. Hines said he is financially capable of putting the system into operation. He requested that Pullman Well Drilling, Inc. inspect and test pump the well. Mr. Hines understands that this well will not produce 400 gpm on a continuous basis. Mr. Hines said he has visited with several irrigation companies regarding putting a different type of irrigation system on the property.

Mr. Freeman asked where the well head shown in the exhibits is located and when the photographs were taken. Mr. Hines answered that the well head is mid-way between the north and south section lines on the easterly half of the quarter. The photographs were taken in June 2003.

Closing Statements

Ms. Best stated that it is clear based on the irrigation questionnaires that the property owner was telling the State of South Dakota that irrigation was not occurring. There are years where excuse for non-use existed, for example in 1993 when there was no need to irrigate due to the amount of precipitation. Nonetheless, the irrigation questionnaires clearly show that there were several periods of at least three years where there was non-use of the water. The three-year period without legal excuse constitutes forfeiture of the water right. The state is taking the position that the water right has been forfeited, that is the statutory forfeiture for non-use. Abandonment can also apply to cancelled water rights. The state would have to show sufficient circumstantial evidence that the landowner actually intended not to irrigate the property. Usually the intent of abandonment is shown by demonstrating evidence that there are no works in place. Ms. Best stated that in this case, there is a well in place and there is no dispute that this was originally a tow line irrigation system. The state is not saying that the well was intentionally abandoned. With respect to forfeiture, there is the three-year period of non-use and it is acknowledged. Ms. Best said the state disputes the issue of whether the property was irrigated within the last three years. If it is assumed that the property was irrigated during the last three years, according to the forfeiture law of South Dakota, the long-standing period of non-use still requires forfeiture. A water right cannot be revived in this state. This issue was decided by the South Dakota Supreme Court in the Stabio Ditch water case.

Ms. Best said the law requires that when someone purchases property with a water right on it, the water right needs to be transferred of record to the chief engineer's office. It is not unusual for a purchaser of land to contact the Water Rights Program to determine whether there is a water permit on the land. That did not occur in this case.

Ms. Best stated that based on the evidence presented to the board today, this is clearly a forfeiture situation.

Mr. Rylance stated that the landowner was not required to complete an irrigation questionnaire until water right was amended in 1996. He said the chief engineer is recommending that this permit be cancelled because of abandonment. The evidence presented to the board today clearly shows that the permit has not been abandoned. Mr. Rylance said Mr. Hines was under the impression that there was a water right on this land.

Mr. Rylance asked the board not to cancel Mr. Hines' water right.

Ms. Best stated that pursuant to the administrative rules of the Water Management Board, it has been a requirement for irrigation permit holders to submit irrigation questionnaires at all times since January 30, 1983. The property owner involved in this matter did submit irrigation questionnaires starting in 1983 until 1995. In 1995, the landowner failed to submit the irrigation questionnaire. Because the irrigation questionnaire is a mandatory requirement, the remedy the board has is a violation of the rules and the board could enforce it through civil penalties. But it wasn't actually a condition on this particular permit. When irrigation questionnaires are not submitted pursuant to the rule, the board holds a hearing and determines whether the condition should be added to the permit. In 1996, the irrigation questionnaire qualification was added to the permit.

Mr. Freeman stated that once forfeiture occurs a permit cannot be revived. He said the only evidence the board has before it are Mr. Schwan's questionnaires, the letter from Pullman Drilling, and the testimony that there may have been a traveling gun on the property. Assuming everything that everyone has said is absolutely true, the only evidence the board has from Pullman goes back to 1987. The traveling gun was two or three years before the purchase of the property. Mr. Freeman said he is forgetting about everything between 1987 and two or three years before Mr. Hines purchased the property, and there is still evidence that Mr. Schwan did not irrigate in 1984, 1985, and 1986. There is no evidence to contradict what Mr. Schwan has shown in his irrigation questionnaires.

Mr. Rylance stated that the regulations do not require the Water Management Board to cancel a permit for forfeiture. ARSD 74:02:01:36 states that the board may cancel a permit for forfeiture. Mr. Rylance said Mr. Hines has legal excuse for not using the water.

Ms. Gunderson noted that after a permit is cancelled, an applicant can apply for a new permit.

Mr. Guhin stated that Mr. Rylance is referring to SDCL 46-5-37, which says after an investigation the chief engineer may recommend cancellation of the permit or right for reasons of abandonment and forfeiture. Mr. Guhin said the question is whether the board has the discretion

to not declare the right abandoned or forfeited if it believes that the facts show it hasn't been abandoned or forfeited. SDCL 46-5-37, which is the forfeiture statute, says that any person entitled to the use of appropriated water fails to use it for a period of three years; such unused water shall revert to the public and shall be regarded as unappropriated public water.

Mr. Brink asked why the department did not cancel the permit for forfeiture before now when it is clear that Mr. Schwan did not use the water for many years.

Ms. Gunderson said normally when someone purchases property they contact the Water Rights Program to determine whether or not there was a valid water permit on the property. Ms. Gunderson stated that just because there is a well on the property doesn't mean there is an irrigation permit. Ms. Gunderson said the permit was forfeited so it needs to be cancelled. She recommended that Mr. Hines submit a new water permit application.

Mr. Rylance said the legal excuse option is available for the board to consider. Mr. Rylance also stated that the statute says if a permit holder fails to use water for a period of three years such unused shall revert to the public and be regarded as unappropriated water.

Chairman Holzbauer requested board action.

Motion by Freeman, seconded by Gunderson, to cancel Water Right No. 3466-3 due to forfeiture. Motion carried. Brink cast the only dissenting vote.

The board asked Mr. Guhin to prepare Findings of Fact and Conclusions of Law.

WATER PERMIT APPLICATION NO. 1587A-1, LEAD-DEADWOOD SANITARY DISTRICT: Eric Gronlund presented his report on the application.

The Lead-Deadwood Sanitary District filed an application to amend Vested Water Right Nos. 1587-1, 1588-1, 1590-1, 1591-1, and 1594-1. These vested water rights appropriated water from the surface water collection system historically operated by Homestake Mining Company. The amendment proposes to authorize operation of a modulating valve to turn out water into Whitewood Creek when the gravity flow portion of the system collects more water than is required for use by the sanitary district.

Mr. Gronlund presented a map showing all of the components of the system. He stated that these rights originate from the vested water rights claims filed by Homestake in 1993 for the surface water collection system. They were used for mining and milling operations at Lead, power generation, municipal uses for Lead, Deadwood, Central City and miscellaneous domestic taps. The claims were ultimately settled in 1999 after the parties entered into a settlement agreement. The Water Management Board issued a final order in September 1999 validating the vested water rights.

In the Spring of 2003 the vested water rights were transferred to the Lead-Deadwood Sanitary District. The vested water rights authorize diversion of water from Spearfish Creek, Whitewood Creek, and the Rapid Creek drainage basin. The total volume cannot exceed 5,800 acre-feet of

water annually averaged over a 10-year period as measured near the Whitetail weir. The maximum combined diversion rate from all diversion points is 13.0 cfs on an average 72-hour basis.

The water right contains the following 19 conditions:

1. The priority date for each water right is:

Claim No.	Claim	Legal Description	Priority Date
1587-1	Spearfish/Peake	Main Intake - NW ¹ / ₄ SE ¹ / ₄ Sec. 6, T3N, R2E Raddick Draw - NE ¹ / ₄ NW ¹ / ₄ Sec. 6, T3N, R2E	June 4, 1877
& 1588-1		Wildcat Springs - SW ¹ / ₄ NW ¹ / ₄ SE ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄	
1000 1		SE ¹ / ₄ Sec. 27, T4N, R2E	
		Ward Draw - NE $^{1}/_{4}$ SE $^{1}/_{4}$ Sec. 10, T3N, R2E	
		Keough Draw - SW ¹ / ₄ Sec. 1, T3N, R2E	
1590-1	Little Rapid	Tillson Intake - SW ¹ / ₄ NE ¹ / ₄ Sec. 26, T3N, R2E	May 1, 1879
		(Rapid Springs No. 1)	
		Homestake Springs - SE ¹ / ₄ SW ¹ / ₄ Sec. 13, T3N, R2E (Rapid Springs No. 2)	August 27, 1885
1591-1	Clark-Bowen	Bowen Intake - SW 1/4 NE 1/4 Sec. 31, T4N, R3E	February 28,
		Clark Springs - NE ¹ / ₄ Sec. 30, T4N R3E	1877
1594-1	Englewood*	NE ¹ / ₄ SE ¹ / ₄ Sec. 17, T4N, R3E	February 28,
	-		1877
* For u	se only under the cond	lition set forth herein	

- 2. Validation authorizes a total volume beneficial use not to exceed 5,800 acre feet of water annually averaged over a 10-year period as measured near the Whitetail weir prior to delivery of water for municipal use and the mining and milling operation at Lead.
- 3. The diversion rate of water from the points of diversion shall be measured in cubic feed per second at the Peake, Little Rapid, and Clark-Bowen weirs, the pipe diverting water from the Englewood Diversion on Whitewood Creek and the Hanna pumping station respectively.
- 4. The maximum authorized combined diversion rate from all diversion points is 13 cfs computed on an average 72-hour basis of total diversions. "Average 72-hour basis" means the diversion rate is averaged over any 72 consecutive hours, a so-called "rolling average."
- 5. Homestake may not divert more than 2 cfs total on an instantaneous basis from the two Little Rapid diversions, 8 cfs total on an instantaneous basis from the Englewood diversion, 3.55 cfs total on an instantaneous basis from the two Peake diversions or 5.89 cfs total on an instantaneous basis from the Clark-Bowen diversion. Moreover, the combined diversion from Hanna pump station and the

Peake diversion may not exceed 14.0 cfs on an instantaneous basis all subject to the collective limit on diversions otherwise set forth herein.

- 6. Diversions from the Hanna pump station shall be used only to the extent necessary when the gravity diversions from Peake, Little Rapid, and Clark-Bowen sources are not sufficient to meet the beneficial uses demand. Before water is drawn from the Spearfish Creek diversions, water from the Little Rapid, Peake, and Clark-Bowen ditches shall be utilized to the maximum extent available.
- 7. A continuous recorder shall be installed at each pipeline weir location for the Peake, Little Rapid, and Clark-Bowen sources. Homestake will maintain daily flow records at these locations and pumping records for the Hanna pump station. Until March 1, 2002, the records shall be submitted to the chief engineer on a quarterly basis. Thereafter, the previous year's records shall be submitted annually to the chief engineer no later than March 1st
- 8. A continuous recorder shall be installed at a measuring point near the Whitetail weir. Homestake shall maintain the daily flow records for such weir. Until March 1, 2002, the records shall be submitted to the chief engineer on a quarterly basis. Thereafter, the previous year's records shall be submitted annually to the chief engineer no later than March 1¹
- 9. Records of the annual volume of water used shall be maintained and the previous year's records submitted annually to the chief engineer no later than March I".
- 10. The Water Management Board retains jurisdiction of Vested Water Right Nos. 1587-1, 1588-1, 1590-1, 1591-1, and 1594-1. The validation diversion rates or annual volume authorized will be reconsidered if information becomes available that warrants Water Management Board reconsideration.
- 11. Any change of the use of the water, change of location of the use, or change of the location of any diversion point is subject to the provisions of SDCL 46-2A-12, 46-5-13.1, 46-5-30.4, and ARSD 74:02:01:14:01. This includes, but is not limited to, changes in water use by Homestake Mining Company, municipalities, and the user taps as well as alterations to the water conveyance system such as a change in a diversion point location, the size of a pipeline or the intake structure of any diversion point. -Any such change may not increase the validated amount of water unless a new water right permit is obtained, may not unlawfully impair existing rights and must be a beneficial use that is in the public interest.
- 12. Water diverted by the Little Rapid pipeline, Peake pipeline, and the Hanna pump station is used for electric power generation at the Englewood hydropower plant with a priority date of January 1, 1906. The Englewood hydro plant is located in the NE ¹/₄ SE ¹/₄ Section 17, T4N, R3E. This is an additional use of the same water from these diversions listed above for mining, milling, domestic and municipal purposes.

- 13. The entire water conveyance system shall be maintained and operated in a manner to prevent the waste or unreasonable use of unreasonable method of diversion of water pursuant to SDCL 46-1-1. Approval of the diversion rates considered in the Settlement Agreement, and the Board's Order arising from the Settlement Agreement, shall not in any manner be construed to authorize waste of water, or to allow diversion of water that is not put to beneficial use. Homestake, for itself, and for its successors in interest, has pledged and assured the parties, and the State of South Dakota, that it will not waste water diverted under the authority of the vested water rights validated pursuant to the Settlement agreement, and that it will maintain its water transmission system in good order and repair, to reasonably protect against leaks and transmission losses.
- 14. Overflow from the South Lead reservoir must be kept to a minimum to prevent waste of water. The overflow from this reservoir shall be measured on a continuous basis and Homestake shall maintain such records. Until March 1, 2002, the records shall be submitted to the chief engineer on a quarterly basis. Thereafter, the previous year's records shall be submitted annually to the chief engineer no later than March
- 15. The Englewood diversion from Whitewood Creek is validated for up to 8.0 cfs pursuant to ARSD 74:02:01:37.02. Diversion of up to 8.0 cfs at the Englewood diversion is authorized only under emergency use in the event of inadequate supply from other sources or delivery system failure. The combined maximum diversion rate of 13 cfs measured on an average 72-hour basis, and the average annual volume limitation of 5,800 acre feet, measured on a ten-year rolling average, (which equals an average annual rate of 8 cfs) as set forth in the chief engineer's recommendation, includes all diversions from the Englewood sources. Homestake's management goal will be to maintain flow in Spearfish Creek, as measured at a gauging station at Cheyenne Crossing, so it will neither fall below 10 cfs on a three-day rolling average, or below 7.5 cfs on an instantaneous basis. If the level of Spearfish Creek as measured at the Chevenne Crossing gauging station falls below 10 cfs on a threeday rolling average, Homestake will reduce diversions at the Hanna pump station and may, in proportion to the reduction, divert up to 4 cfs of water from the Englewood diversion. If the demand for beneficial use of the municipalities and Homestake still cannot be met, then Homestake may divert additional water at the Hanna pump station to meet municipal beneficial use (even though such diversion may cause the flow at the Cheyenne Crossing gauging station to drop below 10 cfs on a three-day rolling average of 7.5 cfs on an instantaneous basis) and, to meet Homestake's beneficial use demand, it may divert up to an additional 4 cfs of water (not to exceed a total of 8 cfs) from the Englewood diversion. The dates of diversion and the quantity of water diverted from the Englewood diversion will be reported to the chief engineer on an annual basis.
- 16. Homestake shall cooperate with the United States Geological Survey (USGS) and pay to reinstall and operate the stream gauge (USGS #06430770) on Spearfish Creek at Cheyenne Crossing until May 1, 2001.

- 17. Homestake has abandoned any and all claims and/or right to divert water from the subject diversions in quantities greater than those set out above.
- 18. The validation of vested rights as described herein constitutes Homestake's sole appropriative right to use water from the diversions considered in this matter. The judgment entered by Lawrence County District Court's Judge McNenney in Cook et al. v. Evans et al. (1918) and the Findings of Fact, Conclusions of Law and Judgment and Decree entered in 1880 and 1882 in the case entitled Atchison v. Hearst, (Lawrence County, First Judicial Circuit, DT) were reviewed for purposes of this matter, and all rights created by those decisions are hereby merged into the Final Order. To the extent water rights granted in those cases are greater than or different from the water rights vested by the Final Order, the rights granted in those cases are abandoned, disclaimed, and extinguished.
- 19. Low flows as needed for downstream domestic uses, including livestock water must be bypassed when the Englewood diversion is used.

Mr. Gronlund said the sanitary district states in its application that there are times that the amount of flow in the water collection system from the gravity flow system alone exceeds the demand and storage capacity in Lead. Due to the closure of the Homestake Mine, there is reduced water demand and there is a need to turn out water more frequently from the gravity flow system when that exceeds demand. The system has historically had this manual turn out valve on the main water line near Englewood. When the manual turn out valve was opened the flow would go into Whitewood Creek.

This application for amendment does not involve the Spearfish Creek component of the vested water right pumped at Hanna because those pumps are already remotely operated and water is not supposed to be pumped when there are sufficient gravity flows.

The district is proposing to replace the manual valve with a remotely actuated modulating valve to better manage the turn out of water when gravity flow exceeds the needs of the district. The district intends to bring only the quantity of water into town necessary to meet the municipal demand and the amount of water needed by Homestake. Although Homestake has closed the mine it is still in reclamation and there is a quantity of water that the district is now providing to Homestake. Any excess gravity flow will be put into Whitewood Creek approximately $4^{-1}/_{2}$ miles upstream of Lead.

The district contacted the Water Rights Program and asked what, if any, permitting was necessary. Water Rights Program staff determined that this change in operation, because of the conditions placed on the vested water right, required an amendment to the vested water right. The district agreed and filed the application that is before the board today.

Mr. Gronlund reported that at the hearing in 1999, two consultants for Homestake testified to the amount of water used for municipal and industrial use. The consultants determined municipal water use at 4.6 cfs and peak monthly maximum industrial water use at 5.3 cfs. This totaled 9.9

cfs, which is the total delivered water that is needed. The municipal water use did not include use by Deer Mountain, the Lead Country Club, and some residential taps that were all diverted prior to water coming into the towns. Based on this, it was determined that a cumulative diversion rate of 13.0 cfs at the diversion rate was necessary. This amount was agreed to by the parties.

One of the conditions the board placed on the vested water right is that Homestake needed to start reporting to the department on a quarterly basis for two years after that on an annual basis diversions from these various water sources. Homestake has been doing this since 1999.

This information was reviewed to determine recent flows from the gravity sources and whether the three gravity sources will on occasion exceed the water demand by the district.

Mr. Gronlund discussed Tables 2 and 3, which are included in his report. Table 2 shows peak readings for the gravity sources for the past three years of monitoring. Table 3 shows maximum and minimum raw water use based on monthly average. Comparing the two tables, it is apparent that there are times when the gravity flow system exceeds the water demands of the district. This necessitates the need to control the gravity system in order to comply with the Water Management Board's final decision to limit overflow from the South Lead Reservoir.

The standard for review in any amendment to a permit or right is that the change can be granted only if the change does not unlawfully impair existing rights and is for a beneficial use and in the public interest.

Mr. Gronlund stated that this surface water collection system has been in existence and diverting water since the late 1800's. The system of diverting will not change. Therefore, the automation of the turn out valve will not impair existing rights.

The beneficial use of water is defined as what is reasonable and useful and beneficial to the appropriator, and at the same time is consistent with the interest of the public of this state in the best utilization of water supplies. The use of water for municipal and industrial use is a beneficial use and it is the best utilization of the water supply to automate this system so excess gravity flows can be managed.

Mr. Gronlund said public interest is not defined in state water law. Public interest is shaped by past decisions of the board, the courts and the testimony presented at the hearing. The automation of this valve will provide for better management by operating the valve to bring to town only the amount of water needed by the district. This will reduce the overflow from the South Lead Reservoir. At times when the entire flow from the gravity sources is not needed by the district, the excess water will go into Whitewood Creek.

The granting of this amendment to automate the turn out valve is reasonable. It is apparent that the gravity system will exceed the demand by the district on occasion. Staff believes the need to turn out water will occur more frequently with the closure and final reclamation of Homestake Mining Company.

The chief engineer recommended approval of Application No. 1587A-1 subject to the 19 existing qualifications and the following additional qualification:

A continuous recorder shall be installed to measure the turn out of flows from the modulating valve into Whitewood Creek near Englewood. The sanitary district shall maintain records of the turn out. The previous year's records shall be submitted annually to the chief engineer no later than March 1 st.

Mr. Gronlund noted that the notice was published in the Black Hills Pioneer. Richard Fort submitted the only letter in response to the notice. Personal notice was also provided to all the parties who signed the settlement agreement.

One of the issues of concern that Mr. Fort raised in his June 16, 2003, letter was the amount of water being conveyed. Mr. Gronlund stated that staff recognizes with the closure of the Homestake Mine that the water use has declined and will continue to decline as reclamation is completed. It is expected that sometime in the future this vested water right will need to be requantified. However, staff believes it is somewhat premature at this time. Homestake closed approximately $1^{1}/_{2}$ years ago, so the three-year period for forfeiture for non-use is not up yet. Also, reclamation activities are ongoing and at some time in the future, water use may decline even more.

Ms. Gunderson asked if the board's action on this amendment will in any way affect whether or not the scientific laboratory goes into the mine. Mr. Gronlund said he does not believe the board's action today will affect whether or not the scientific laboratory will be located at the mine. Mr. Gronlund said he assumes that if the laboratory becomes a reality, the sanitary district will be a provider of water to the laboratory.

Jack Cole, Spearfish Canyon Preservation Trust, discussed the settlement agreement.

Chairman Holzbauer requested board action.

Motion by Freeman, seconded by Gunderson, to approve Water Permit Application No. 1587A-1, Lead-Deadwood Sanitary District, subject to the qualifications set forth by the chief engineer. Motion carried.

FINDINGS OF FACT, CONCLUSIONS OF LAW AND FINAL DECISION FOR CANCELLATION OF A PORTION OF WATER RIGHT NO. 970-3, WILLIAM ST. CLAIR:

John Guhin reported that the division recommended two changes to the proposed Findings of Fact, Conclusions of Law and Final Decision. Mr. Guhin said those changes are appropriate and he recommended the board adopt them.

Motion by Freeman, seconded by Gunderson, to modify the board's proposed Findings of Fact, Conclusions of Law and Final Decision to incorporate the DENR's suggested changes to Finding No. 9 and Finding No. 29. Motion carried.

Mr. Guhin noted that Mr. St. Clair and Mr. Dettler submitted comments on the proposed findings. The division submitted a response to the comments. Mr. Guhin recommended the board adopt DENR's response.

Motion by Freeman, seconded by Gunderson, to adopt DENR's response. Motion carried.

Motion by Freeman, seconded by Gunderson, to adopt the Findings of Fact, Conclusions of Law and Final Decision in the matter of the cancellation of a portion of Water Right No. 970-3, William St. Clair. Motion carried.

<u>WATER PERMIT APPLICATION NO. 6382-3, WILLIAM ST. CLAIR:</u> Jim Goodman presented his report on the application. He also presented a map (Exhibit 3) that was used in the hearing for No. 970-3. Mr. Goodman pointed out on the map the location of these water rights.

The application proposes to transfer acres held under Water Right No. 4586-3 and diversion authority from Water Right Nos. 970-3 and 987-3 to irrigate 100 acres in Spink County.

Water Right No. 4586-3 appropriates 1.7 cfs from one well located in the SW $^{1}/_{4}$ NW $^{1}/_{4}$ of Section 28 to irrigate 364 acres located in the N $^{1}/_{2}$ of Section 28 and the SW $^{1}/_{4}$ of Section 21. Application No. 6382-3 would move the location of 100 acres authorized by 4586-3 to the NE $^{1}/_{4}$ of Section 29. SDCL 46-5-34 allows an irrigation water right to be severed from one parcel of land and simultaneously transferred to another parcel if it is impractical to use all or any part of the water beneficially or economically for irrigation on the current land. Mr. St. Clair does not intend to change any diversion rates authorized by Water Right No. 4586-3.

The applicant also requests to transfer a portion of the diversion authority from Water Right Nos. 970-3 and 987-3 to provide water for irrigation utilizing the well located near the center of the NE $^{1}/_{4}$ of Section 29. Water Right No. 970-3 was re-quantified for 1.88 cfs from one well in the NW $^{1}/_{4}$ of Section 29 for irrigation of 132 acres also located in the NW $^{1}/_{4}$ of Section 29. Water Right No. 987-3 is on record as appropriating 2.2 cfs from one well (same well as authorized by 970-3) to irrigate 154 acres located in the SW $^{1}/_{4}$ of Section 20. The applicant claims that due to recent replacement of pumps and irrigation systems, he has conserved 1.17 cfs (526 gpm) which can now be transferred to the irrigation well and system in the NE $^{1}/_{4}$ of Section 29.

Mr. Goodman stated that the Tulare East James aquifer has been determined by the Water Management Board to be fully appropriated based upon water use.

Mr. Goodman stated that the first issue is the transfer of 100 acres from Water Right No. 4586-3. Transfers can be done under SDCL 46-5-34, however, water has to be transferred under this statute. Mr. Goodman said one could argue that transferring 100 acres would imply that 200 acre-feet of water (statutory limit of two acre-feet per acre) is also being transferred. However, this water was never used under the existing water right because of limitations in the design of the system. This is a system that has one well capable of producing 1.7 cfs, which would only be used among three potential pivot sites. Mr. Goodman stated that transferring 100 acres from Water Right No. 4586-3 will more than likely not affect the volume of water used under that water right so there is nothing to transfer.

Mr. Goodman said the next issue is transferring diversion authority from Water Right Nos. 970-3 and 987-3 to this application. The Water Management Board has already quantified Water Right No. 970-3 to a rate of 1.88 cfs for irrigation of 132 acres. The diversion rate has changed by the installation of different pumps and equipment but this was already recognized and quantified by the Water Management Board. Mr. Goodman said there is nothing to transfer.

Water Right No. 987-3 was licensed for 2.2 cfs for irrigation of 154 acres in the SW $^{1}/_{4}$ of Section 20 from one well near the center of the NW $^{1}/_{4}$ of Section 29. Mr. Goodman said this appears to be the same well that is used for Water Right No. 970-3. Further complicating this issue is Water Right No. 4158-3, which is licensed for 1.94 cfs from a well located in the SE $^{1}/_{4}$ SW $^{1}/_{4}$ of Section 20 for the irrigation of 136 acres in the SW $^{1}/_{4}$ of Section 20. Water Right No. 4158-3 overlaps the older Water Right No. 987-3. Mr. Goodman said it appears that Water Right No. 987-3 has been abandoned for many years, or at least licensed into Water Right No. 4158-3. The Water Rights Program licensed No. 4158-3 and actually missed the fact that there was another water right already in place. Mr. St. Clair has continued to use both wells and he has continued to apply water to all that land. Mr. Goodman said No. 987-3 has been forfeited and abandoned and this right should be cancelled.

The chief engineer recommended denial of Application No. 6382-3 for the following reasons:

1) The diversion authority which the applicant proposes to transfer under Water Right No. 970-3 no longer exists; 2) the proposed transfer would be an increase in diversion from the aquifer; 3) all water available for appropriation within the Tulare East James Aquifer in Spink County is presently appropriated; and 4) it is not in the public interest because of the unavailability of proven recharge capacity within the Tulare East James Aquifer.

Chairman Holzbauer administered the oath to William St. Clair.

Mr. St. Clair testified that according to the research he and Kevin Dettler did, it appears that the old permit still exists. Irrigation questionnaires were submitted for the old permit and it was noted on the questionnaires that the well was not used. Mr. St. Clair said the only question was whether or not the permit was valid and as it turns out, the permit was not valid.

Mr. St. Clair said Jim Goodman told him the only way he could get a valid permit for this project would be if someone would abandon an existing permit in that aquifer. It has been documented that Permit No. 970-3 has been pumped at 1,200 gpm for 40 years. Mr. St. Clair said he has documented the fact that he reduced the withdrawal rate to 800 gpm in 2002 simultaneously with putting in this new system. Mr. St. Clair said Kevin Dettler installed a new pivot system under No. 4158-3, which was allotted 990 gpm. The pivot system has an 800 gpm sprinkler package with restrictor devices on each nozzle that cuts the pumping rate. By doing this water extraction has been reduced. Mr. St. Clair said he is pumping 590 gpm less when these two systems are operating. This is no different from someone abandoning their permit, so this water should be available to use. When these two systems are pumping, 2.6 acre-feet less water is withdrawn and turned back to the state. Over a period of 30 days, that is about a foot of water. Mr. St. Clair said he will be pumping the same water no matter which well it is being pumped.

Chairman Holzbauer administered the oath to John McDowell. Mr. McDowell testified that originally the reason people switched to low pressure was for energy savings. It was determined that the bigger savings may be the efficiency of the sprinkler systems. If 10 inches of water is to be pumped with a 90% efficient system, 11 inches will need to be pumped. If a system is 75% efficient, 14 inches of water will need to be pumped to net 10 inches of water on the field. Mr. McDowell said a low pressure sprinkler system does a better job.

Mr. St. Clair said it seems obvious that water is available because he is no longer pumping at the same rate and the water has been returned to the state. He requested board approval of the permit application.

Mr. Holzbauer questioned whether or not the law will allow the board to approve this permit.

Ms. Best offered Exhibit 1, the department's file on No. 970-3, and Exhibit 2, the department file for No. 6382-3. The exhibits were admitted into the record.

Ms. Best and Mr. St. Clair provided closing arguments.

Mr. St. Clair asked the board to transfer either Permit No. 987-3 or No. 4158-3 to the area he wants to irrigate.

Board discussion took place.

Mr. Guhin said that assuming No. 987-3 and No. 4158-3 are valid, there is a total amount of water Mr. St. Clair can use from those combined. They would have to be quantified and severed.

Ms. Best said SDCL 46-5-6 states that there is a maximum quantity of water that can be applied so that statute applies to the parcel with the dual water permit. If there are permits that were issued over and above that, there is surplus, not in terms of water but in terms of paper only.

Chairman Holzbauer requested board action.

Motion by Brink, seconded by Gunderson to approve Water Permit No. 6382-3, William St. Clair subject to the qualifications which will be prepared by John Guhin and submitted to the board for approval at the next Water Management Board meeting.

More board discussion took place.

A roll call vote was taken and the motion carried. Freeman cast the only dissenting vote.

Mr. Guhin was asked to prepare the Findings of Fact, Conclusions of Law and Final Decision.

<u>FLOOD CONTROL PERMIT NO. FC-30, CITY OF SIOUX FALLS:</u> Diane Best stated that this matter was advertised and no petitions to intervene were received.

Chairman Holzbauer administered the oath to Tom Berkland, city of Sioux Falls, who testified regarding the flood control application. Mr. Berkland stated that the city of Sioux Falls first constructed the flood control system in the late 1950's to control flooding on the Big Sioux River and Skunk Creek. That system was designed in the early 1950's and the flows were based on a history of evidence on the Big Sioux River and Skunk Creek of only four to eight years. Shortly after the system was in, with flood events that occurred both on the Big Sioux River and Skunk Creek, it because evident that the calculations for the 100-year event were not correct. Throughout the 1970's and 1980's studies were conducted and new higher figures were determined. Originally, 23,000 cfs for the Big Sioux River and 9,000 cfs for Skunk Creek. The new studies showed 36,000 cfs for the Big Sioux River and about 23,000 cfs for Skunk Creek. The city has been working on improving the system to protect the citizens and the property of Sioux Falls from a 100-year event. This had to be done in a way that that Federal Emergency Management Administration (FEMA) would accept. Working with the Corps of Engineers and FEMA, the city has established a program to improve the flood control system. Mr. Berkland said this is being done in three phases. He explained the three phases of the project.

Don Stroup presented his report on the application.

Mr. Stroup's conclusions include the following. Consideration of modifications to the existing flood control system was evaluated on criteria pertaining to the proposed project's future impacts. The Corps of Engineers used software programs, analyses procedures and quality assurance procedures accepted in the public and private sectors to produce geotechnical and hydrologic data for the design of this project. Design data shows the project will reduce the damage from flooding or erosion in the area, the project will not increase the likelihood or severity for flood damages in areas other than the project area or the area proposed to be benefited, the project will not endanger human life or property, nor impair existing rights. When finalized, the design for Phases II and III, any design engineering change notices, water surface elevation or other calculations and software calibration data pertaining to these phases or engineering change notices should be reviewed by the chief engineer before the work is implemented.

The chief engineer recommended approval of the application with the following qualifications:

- 1. The city of Sioux Falls is responsible for operation and maintenance of the flood control works.
- 2. Flood Control Permit No. FC-30 is subject to securing easements and/or land acquisitions on any areas, other than city property, where construction activities will take place or additional lands are flooded. These documents shall be held by the city of Sioux Falls and be available for review by the Water Rights Program.
- 3. Prior to construction of Phase II and III, final designs for that phase shall be submitted to the chief engineer of the Water Rights Program for review and approval.

- 4. Engineering change notices, software calibrations or other calculations that effect water surface elevations or seepage analysis data previously submitted are subject to review and approval by the chief engineer.
- 5. Design of all levees in Phases II and III shall include measures to reduce uplift pressures to result in an exit gradient not to exceed 0.8 at the landward levee toe, to satisfy criteria in EM 1110-2-1901, Seepage Analysis and Control for Dams.
- 6. The Operation and Maintenance (O&M) Manual for the system shall be completed by the US Army Corps of Engineers upon completion of construction. The manual shall set forth criteria for operation of the diversion dam in various flood events. The manual shall provide guidelines for the controlled breach of the levee system if a breach is needed to prevent a catastrophic, random failure. The operating manual is subject to review and approval by the chief engineer.
- 7. The Water Management Board retains jurisdiction of Flood Control Permit No. FC-30 in the event that additional information shows this project causes an increase in the severity of flood damages in areas other than the project area.

Motion by Freeman, seconded by Brink, to approve Flood Control Permit Application No. FC-30, city of Sioux Falls subject to the qualifications set forth by the chief engineer. Motion carried.

ADJOURN: Chairman Holzbauer declared the meeting adjourned at 3:15 p.m. CDT.

Total Cours

Approved this 1st day of October, 2003.

Leo Holzbauer, Chairman

WATER MANAGEMENT BOARD MEETING July 10, 2003

Qualifications: wi - well interference wcr -well construction rules

iq - irrigation questionnaire

if - low flow

Unopposed New Water Permit Applications Issued Based on the Chief Engineer Recommendations

No.	Name	Address	County	Amount	Use	Source	Qualifications
1786-1	Kaski Homes, Inc.	Piedmont	MD	0.1 cfs	shd	l well-Minnelusa Formation	wi
1787-1	Kaski Homes, Inc.	Piedmont	MD	0.1 cfs	shd	1 well-Minnelusa Formation	wi
1788-1	Veritas Energy, Inc.	Newell	BU	0.1 cfs	stock water	l well-Inyan Kara Formation	wi
1790-1	John H Merriman	Lemmon	PK	2.06 cfs	144 acres	Grand River	If, iq
2368A-2	Custer Ranch LLC	Hermosa	CU	no add'l	no add'I	Battle Creek	If, iq
2503-2	Lynn Leichtnam	Presho	LY	47.4 AF	fwp,rec,live	runoff	If, 1 special
2504-2	Beaver Lake Campground	Custer	CU	0.056 cfs	commercial	l well-Precambrian Rock	wi, wcr
6041A-3	AgStar Financial Services	Letcher	AU	No add'l	commercial	3 wells-Codell Aquifer	wi, wcr, 2 special
6401-3	Michael J Johnson	Madison	LA	5.56 cfs	commercial	dugout-vermillion e fork	none
6402-3	Higman Sand & Gravel	Akron IA	UN	1250 AF	commercial	gravel pit	2 special
6404-3	John Sumption	Frederick	BN	4.0 cfs	320 acres	l well-Elm:Northern Brown	wi, wcr, iq
6408-3	Gordon Bleeker	Castlewood	HM	3.56 cfs	280 acres	4 wells-Big Sioux North	wi, wcr, iq